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| APPLICATION NO.                           | FILING DATE | FIRST NAMED INVENTOR                      | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|---|---------------------|------------------|
| 10/522,285                                | 11/21/2005  | Engelbertus Cornelius Petrus Maria Vossen | NL 020700           | 1498             |
| 24737                                     | 7590        | 01/15/2008                                |                     |                  |
| PHILIPS INTELLECTUAL PROPERTY & STANDARDS |             |   | EXAMINER            |                  |
| P.O. BOX 3001                             |             |   | PERRY, ANTHONY T    |                  |
| BRIARCLIFF MANOR, NY 10510                |             |   | ART UNIT            | PAPER NUMBER     |
|   |             |   | 2879                |                  |
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

10/522,285

Applicant(s)

VOSSEN ET AL.

Examiner

Anthony T. Perry

Art Unit

2879

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 25 January 2005.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 January 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
- Paper No(s)/Mail Date 11/01/06.

- 4) ☐ Interview Summary (PTO-413)
- Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### *Claim Rejections - 35 USC § 112*

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 4 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 4 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

A broad range or limitation together with a narrow range or limitation that falls within the broad range or limitation (in the same claim) is considered indefinite, since the resulting claim does not clearly set forth the metes and bounds of the patent protection desired. See MPEP § 2173.05(c). Note the explanation given by the Board of Patent Appeals and Interferences in *Ex parte Wu*, 10 USPQ2d 2031, 2033 (Bd. Pat. App. & Inter. 1989), as to where broad language is followed by "such as" and then narrow language. The Board stated that this can render a claim indefinite by raising a question or doubt as to whether the feature introduced by such language is (a) merely exemplary of the remainder of the claim, and therefore not required, or (b) a required feature of the claims. Note also, for example, the decisions of *Ex parte Steigewald*, 131 USPQ 74 (Bd. App. 1961); *Ex parte Hall*, 83 USPQ 38 (Bd. App. 1948); and *Ex parte Hasche*, 86 USPQ 481 (Bd. App. 1949). In the present instance, claim 4 recites the broad recitation of not exceeding 3 microns, and the claim also recites a range of 0.1 to 0.8 microns which is the narrower statement of the range/limitation.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-8 and 11-13 are rejected under 35 U.S.C. 102(b) as being anticipated by Watanabe (US 5,801,483).

Regarding claim 1, Watanabe discloses a low-pressure mercury vapor discharge lamp comprising a discharge vessel (1), the discharge vessel enclosing, in a gastight manner, a discharge space provided with a filling of mercury and a rare gas (col. 3, lines 10-16), the discharge vessel comprising means for maintaining an electric discharge in the discharge space, a portion of the surface of the discharge vessel facing the discharge space being provided with a protective layer (7), characterized in that the protective layer comprises aluminum oxide or yttrium oxide and further comprises a borate and/or a phosphate of an alkaline earth metal and/or of scandium, yttrium, or a further rare earth metal (for example, see Fig. 1 and col. 3, lines 22-63).

Regarding claim 2, Watanabe teaches the alkaline earth metal is calcium, strontium, and/or barium (col. 3, lines 22-63).

Regarding claim 3, Watanabe teaches the rare earth metal is lanthanum, cerium, and/or gadolinium (col. 3, lines 22-63).

Regarding claim 4, Watanabe teaches that the aluminum oxide comprises particles with an effective particle size not exceeding 3 microns (col. 6, lines 27-30).

Regarding claim 5, Watanabe teaches that the protective layer comprises an alkaline earth borate (col. 3, lines 22-63), and in that the thickness of the protective layer is in a range from 0.1 to 50 microns (Table 1).

Regarding claim 6, Watanabe teaches that the protective layer comprises  $\text{SrB}_4\text{O}_7$  (col. 3, lines 22-63).

Regarding claim 7, Watanabe teaches the thickness of the protective layer being in a range from 1 to 20 microns (Table 1).

Regarding claim 8, Watanabe teaches the discharge vessel comprising at least one stem (5), said stem being provided with the protective layer.

Regarding claim 11, Watanabe discloses a low-pressure mercury vapor discharge lamp characterized in that a side of the protective layer facing the discharge space is provided with a luminescent layer of a luminescent material (Table 1).

Regarding claim 12, Watanabe discloses a low-pressure mercury vapor discharge lamp as claimed in claim ii, characterized in that the luminescent layer is provided with an additional protective layer (Table 1).

Regarding claim 13, Watanabe discloses a low-pressure mercury vapor discharge lamp as claimed in claim 11, characterized in that the luminescent material comprises a mixture of green-luminescent, terbium-activated cerium- magnesium aluminate, blue-luminescent barium-magnesium aluminate activated by bivalent europium, and red-luminescent yttrium oxide activated by trivalent europium (col. 3, lines 22-63).

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 9-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Watanabe (US 5,801,483) in view of Hendriks et al. (WO 01/56350).

Regarding claim 9, Watanabe discloses a low-pressure mercury vapor discharge lamp as claimed in claim 1, but does not specifically teach the discharge vessel being made from a glass comprising silicon dioxide and sodium oxide, wherein the glass composition comprises 60-80 % SiO<sub>2</sub> and 10-20 % Na<sub>2</sub>O. Hendriks teaches a vessel made from silicon dioxide and sodium oxide with the percentages by weight as 60-80 % SiO<sub>2</sub>, 10-20 % Na<sub>2</sub>O (page 2, lines 25-28).

Hendricks teaches that the glass is relatively cheap compared to the glass conventionally used in discharge lamps. Accordingly, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the glass composition taught by Hendricks in order to reduce manufacturing costs.

Regarding claim 10, Hendriks teaches a low-pressure mercury vapor discharge lamp, wherein the glass composition comprises the following constituents: 70-75 % SiO<sub>2</sub>, 15-18 % Na<sub>2</sub>O, 0.25-2 % K<sub>2</sub>O by weight (for example, see page 4, lines 2-32). Hendricks teaches that the glass is relatively cheap compared to the glass conventionally used in discharge lamps.

Accordingly, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the glass composition taught by Hendricks in order to reduce manufacturing costs.

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### Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to *Anthony Perry* whose telephone number is (571) 272-2459. The examiner can normally be reached between the hours of 9:00AM to 5:30PM Monday thru Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nimesh Patel, can be reached on (571) 272-2457. **The fax phone number for this Group is (571) 273-8300.**

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Anthony Perry/

Anthony Perry  
Patent Examiner  
Art Unit 2879  
January 7, 2008

PETER MACCHIAROLO  
